

THE TOOLS OF CREATIVE PEOPLE

In the book *Sparks of Genius*, Robert and Michele Root-Bernstein (*) describe what they call “thinking tools.” Creative people in all professions and occupations use these “thinking tools” to understand, solve problems, create, and represent their creations. These “thinking tools” are central in the understanding of all knowledge, and are the reasons we can find common processes in different areas of the curriculum. Arts integrated approaches may be based on these shared thinking tools.

When searching the standards for practices shared between the visual arts and an other content area, look for practices that draw on shared thinking tools.

THE TOOLS OF CREATIVE PEOPLE	
OBSERVING	To pay attention to what you see, hear, taste, smell, and touch
IMAGING	To recall and create images from a sense or sensation
ABSTRACTING	To simplify complicated experiences and senses
PATTERNING	To recognize patterns or form patterns
ANALOGIZING	To realize that two apparently different things share important properties or functions
BODY THINKING	To think through sensations and awareness of muscle, sinew, and skin
EMPATHIZING	To lose oneself into the subject of attention or study
DIMENSIONAL THINKING	To experience space, to imagine a 2-D image in more than 2-D
MODELING	To combine dimensional thinking, abstracting, analogizing, and body skill
PLAYING	To experience childlike joy with irreverence for conventional procedure, purpose, and the rules of the game
TRANSFORMING	To translate between one “thinking tool” into another, like between imaginative tools and formal languages of communication
SYNTHESIZING	To understand by combining many ways of thinking
CREATE	To forge connections between what is real, what is imagined, and what is created - to bridge between mind and matter

(*) Root-Bernstein, Robert and Michele. *Sparks of Genius. The Thirteen ThinkingTools of the World’s Most Creative People*. New York: Mariner Books, 2001.

Compiled by M.Barbosa, 2012